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ABSTRACT

Personality characteristics among females admitted to the U.S. Air Force Academy were compared to those of male cadets and to females attending other colleges. The Personality Research Form-E (Jackson, 1974) was administered to all 217 females of an entering class at the Academy during the first few days of basic cadet training. Approximately one-half of the entering male cadets (520) also completed the instrument. It was found that the female cadets were achievement-oriented, assertive, outgoing, adventurous, persistent, expressive, systematic, serious-minded, practical, and socially proper. They also preferred structure to ambiguity. Female cadets were similar in personality to male cadets. However, while similar on most personality dimensions, the global effect was that Academy-entering females were relatively nontraditional and entering males were relatively traditional. Relative to civilian female college students, entering female cadets scored significantly higher on scales measuring need for achievement, affiliation, cognitive structure, dominance, endurance, exhibition, and order. Female cadets scored lower relative to civilian college females on harm-avoidance, play, and sentience. It is suggested that the Academy attracts achievers and relatively dominant or assertive individuals. Academy training emphasizes teamwork and involves physically exciting and sometimes frightening activities. It is proposed that individuals who elect the Academy are pragmatic and serious-minded. Enjoying a structured environment and being systematic by nature, cadets attend an institution high in consistency, rules, orderliness, and "planfulness." (SW)

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# WHO GOES TO A SERVICE ACADEMY?

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U. S. AIR FORCE ACADEMY

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ABSTRACT

In 1976 the United States service academies accepted female cadets (or midshipmen) for the first time. This study addressed the issue of personality characteristics among females admitted to the United States Air Force Academy. The Personality Research Form-E was administered to all females in a recent entering class. Relative to civilian female college students, entering female cadets scored significantly higher on scales measuring need for achievement, affiliation, cognitive structure, dominance, endurance, exhibition and order. Female cadets scored lower relative to civilian college females on harmavoidance, play, and sentience. Results are discussed in terms of the nature of military academies and the typical profile for male cadets.

# WHO GOES TO A SERVICE ACADEMY?

Richard L. Hughes
U. S. Air Force Academy

In 1976 the U.S. service academies accepted female cadets (or midshipmen) for the first time. This provided a unique natural experiment concerning a major social issue, and the integration of females into the academies received a fair amount of scholarly attention (DeFleur, 1980; Stiehm, 1981). One aspect of sexual integration at the academies which has not received much attention, however, concerns the personalities of females attracted to what would seem to be - or at least have been - a bastion of male traditionalism.

Although many motives affect one's decision to enter a service academy, it is reasonable to think that personality is an important moderator affecting both the institution's appeal and an individual's successful competition for appointment there. Besides having high academic standards, the academies emphasize athletics, training in military leadership positions, and "motivational" military experiences such as soaring or parachuting. Previous research and observation suggested a distinct personality profile for male cadets so interest naturally turned to whether female cadets represent a similar "type."

We were concerned with two basic questions: (1) Were there any significant differences in group means on traits between entering female cadets and females at other colleges? and (2) On a broader level of analysis, how similar were mean personality profiles for male and female cadets?

## PROCEDURE

The Personality Research Form - E (Jackson, 1974) was administered to all females (N=217) in an entering class at the Air Force Academy. They completed

the test during the first few days of basic cadet training. Approximately one-half of the entering male cadets (N=520) also completed the PRF. Testers insured the respondents that the results would be treated anonymously and would not result in any actions toward them individually.

## RESULTS

Means and standard deviations for each of the PRF factors were computed for the female and male groups. Female mean scores were compared with Jackson's published norms for college females. The results are summarized in Table 1. Means for female cadets were significantly different from those for civilian college females on 11 of 21 scales. Two other factor scores only barely missed statistical significance.

A second analysis of the scores was based upon interpreting both male and female cadet PRF scale means against college male norms. We wondered what the new female cadets were like as a group, not only in terms of civilian female norms, but also, as it were, in terms of "cadet" norms. To answer that we looked at the placement of male and female cadet mean scale scores relative to the college male scale means. Male and female entering cadets were concurrently higher or lower relative to the college male means on 18 of 21 personality dimensions. They differed on the following scales: Aggression (females lower); Change (females higher); and Sentience (females higher).

## DISCUSSION

Female cadets at the Air Force Academy present a group mean personality profile which is generally - and unsurprisingly - nontraditional. They are achievement-oriented, assertive, outgoing, adventurous, persistent, expressive, systematic, serious-minded, practical and socially proper. They prefer structure to ambiguity. Female cadets are similar in personality to male cadets,

although, of course, the social experience of males and females may be significantly different even when they are psychometrically equivalent on various traits.

The mean profile for entering female cadets (and entering male cadets too) seems easily interpretable in terms of an individual's attraction and selection to the Air Force Academy. It is an institution with an explicit achievement ethic and it attracts achievers. Its charter is to develop military leaders and it attracts relatively dominant or assertive individuals. Academy training emphasizes teamwork and the institution attracts gregarious personalities. Parts of training involve physically exciting and sometime frightening activities and entering cadets score low on Harmavoidance. A military Academy is almost a professional school at the undergraduate level and the individuals who elect the Academy experience are pragmatic and serious-minded. High in need for social recognition, cadets selected a school and career where decorum and making a good impression are highly valued. Enjoying a structured environment and being systematic by nature, cadets attend an institution epitomizing consistency, rules, orderliness and planfulness.

In sum, then, the personality profile for entering female cadets provides a clear answer to the question "What kind of female would want to attend a (largely male) military Academy?" The answer is, just the kind of person who has always wanted to attend the Academy, and just the type who characterologically seems best suited to the unique challenges and demands of the profession. Of course, it must be recognized that the meaning of the "same" personality profiles for entering male and female cadets is problematic. While similar on most personality dimensions, the global effect is that entering Academy females are relatively nontraditional and entering males are relatively traditional. That creates interesting dynamics!

In concluding, two ambiguities of the study must be noted. One analysis involved comparisons between entering Academy cadets and college students from presumably a range of academic classes. It is thus possible that differences between the cadet means and civilian means reflect simply developmental differences. That is considered unlikely because the personality profile for entering cadets does seem conceptually so congruent with unique aspects of the institution. Another ambiguity concerns whether the circumstances of testing might have biased the results. Despite attempts to minimize that influence, it is nonetheless possible that the new cadets responded as they thought a cadet should respond. It is also possible that the stressfulness of the new environment, not the least of which involved recent separation from home for many, had an unknown effect on responses.

PRF SCALE MEANS AND SD's FOR

AIR FORCE ACADEMY FEMALES AND CIVILIAN COLLEGE FEMALES

| | USAFA Females $\bar{X}$ N = 217 | S.D. | Civilian College Females N = 115 | S. D. | $\bar{z}$ | P |
|---|---|---|---|---|---|---|
| Abasement | 7.7 | 2.9 | 7.7 | 3.0 | | |
| Achievement | 12.4 | 2.9 | 10.0 | 3.4 | 6.86 | .01 |
| Affiliation | 9.9 | 3.9 | 8.9 | 4.0 | 2.17 | .05 |
| Aggression | 6.8 | 3.3 | 6.9 | 3.6 | | |
| Autonomy | 6.5 | 3.1 | 7.1 | 3.2 | 1.62 | |
| Change | 10.1 | 2.9 | 9.9 | 3.1 | | |
| Cognitive Structure | 10.0 | 2.9 | 8.7 | 3.5 | 3.33 | .01 |
| Defendence | 5.6 | 3.0 | 6.0 | 3.5 | | |
| Dominance | 11.7 | 3.4 | 7.6 | 4.4 | 8.54 | .01 |
| Endurance | 11.2 | 3.2 | 10.2 | 3.3 | 2.70 | .01 |
| Exhibition | 8.3 | 4.1 | 7.2 | .8 | 2.08 | .05 |
| Harmavoidance | 6.0 | 3.7 | 9.5 | 4.4 | 7.29 | .01 |
| Impulsivity | 5.7 | 3.4 | 6.5 | 4.0 | | |
| Nurturance | 11.2 | 3.1 | 10.9 | 3.4 | | |
| Order | 9.3 | 4.4 | 8.2 | 4.5 | 2.11 | .05 |
| Play | 8.3 | 3.1 | 9.0 | 4.0 | 2.0 | .05 |
| Sentience | 9.9 | 3.0 | 10.8 | 2.8 | 2.73 | .01 |
| Social Recognition | 8.9 | 3.0 | 8.2 | 3.7 | 1.75 | |
| Succorance | 7.0 | 3.5 | 8.7 | 3.7 | | |
| Understandance | 9.6 | 3.3 | 9.7 | 3.5 | | |
| Desirability | 12.3 | 2.8 | 11.0 | 2.5 | 4.2 | .01 |

Table 1

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